

San Francisco Bay Conservation and Development Commission

455 Golden Gate Avenue, Suite 10600, San Francisco, California 94102 tel 415 352 3600 fax 415 352 3606

July 6, 2018

Application Summary

(For Commission consideration on July 19, 2018)

BCDC Permit Application Number: 2001.008.44 (Material Amendment)
Application Filed Complete: June 25, 2018
Deadline for Commission Action: September 23, 2018
Staff Assigned: Rebecca Coates-Maldoon
415/352-3634
rebecca.coates-maldoon@bcdc.ca.gov

Summary

Applicant: California Department of Transportation (Caltrans).

Location: In the Bay and within the 100-foot shoreline band, located on either end of the former East Span of the San Francisco–Oakland Bay Bridge (Bay Bridge), on the east side of Yerba Buena Island, in the City and County of San Francisco, and at the former Oakland Army Base, in the City of Oakland, Alameda County (Figure 1).



Figure 1. Proposed Project Location

Project: The proposed project would involve reuse of three remaining marine foundations and one remaining land foundation of the demolished Bay Bridge East Span as the foundations for new public access piers. The project also involves construction of various public access improvements including: a landing plaza, shared access path, interim and final parking at Yerba Buena Island, on-land improvements to connect to the Bay Bridge bicycle and pedestrian bridge at the former Oakland Army Base, and seating and other site furnishings at both locations.

Retention and reuse of the three marine foundations, called Piers E2, E21, and E22, and one land-based foundation, called Pier E23, of the former East Span, would require an amendment to BCDC Permit No. 2001.008.43 (“Bay Bridge permit”) to delete a requirement that those foundations be removed. The proposed amendment would also allow for the use of controlled explosives to demolish Piers E19 and E20, the other two remaining marine foundations of the original East Span of the Bay Bridge. The removal of Piers E19 and E20, but not the proposed method for these specific piers, is authorized under the Bay Bridge permit.

**Issues
Raised:**

The staff believes that the application raises two primary issues, specifically: (1) whether the project would be consistent with the Commission’s law and policies on allowable Bay fill, including public benefit versus detriment, safety of fills, climate change, and natural resources; and (2) whether maximum feasible public access is provided consistent with the project, and if the project is otherwise consistent with Bay Plan policies on public access, recreation, and appearance, design, and scenic views.

Project Location

Site Description and Existing Use. The proposed project is located on either end of the former East Span of the San Francisco–Oakland Bay Bridge. Like the new East Span, the former East Span connected to land at the east side of Yerba Buena Island, in the City and County of San Francisco, and at an area adjacent to the former Oakland Army Base, in the City of Oakland, Alameda County.

Yerba Buena Island. The proposed project site at Yerba Buena Island includes, in the Bay, one marine foundation from the former East Span (Pier E2), and on land, an approximately 1.37-acre area extending from the shoreline adjacent to Pier E2 to North Gate Road and the entrance to the U.S. Coast Guard base. The larger project area for the Bay Bridge East Span extends to the entrance of the vehicular tunnel between the Bay Bridge’s East and West spans.

Pier E2 is located in the Bay approximately 120 feet east of Yerba Buena Island. Pier E2 is a large concrete structure that bears on rock and rises to about 35 feet above mean sea level. On land near Pier E2 is a vacant building on the National Register of Historic Places, called the Torpedo Building. The Torpedo Building, which is not part of the project site but directly adjacent to it, is owned by the Treasure Island Development Authority (TIDA). TIDA hopes to rehabilitate and reuse the building in the future in some capacity; however, there are currently no plans in development. Army Road, a non-public street suitable for construction vehicles only, runs along the shoreline in this area, extending inland to the entrance of the U.S. Coast Guard base. The shoreline adjacent to Army Road is a sandy beach, approximately 460 feet long and 25 feet wide (at high tide). The beach has not been open to the public due to its location within the Bay Bridge project area and former use by the U.S. Navy. The beach and an adjacent portion of the site contain contamination resulting from historic use of the upland area as a landfill by the U.S. Navy. As a result of this historic use, a portion of the project area is subject to landfill closeout procedures by the San Francisco Bay Regional Water Quality Control Board (RWQCB) and Department of Toxic Substances Control (DTSC). On either side of the sandy beach, unengineered riprap has been placed along the shoreline, including near Pier E2 and the Torpedo Building.

Yerba Buena Island is designated as a Waterfront Park, Beach Priority Use Area in the San Francisco Bay Plan.

Former Oakland Army Base. The project site in Oakland consists of, in the Bay, four marine foundations of the former East Span (Piers E19, E20, E21, and E22), and on land, an approximately 1-acre area extending from the touchdown of the former span (the “Oakland Touchdown”) to the landing of the Bay Bridge bicycle and pedestrian bridge. The larger project area for the Bay Bridge East Span extends to approximately 1,300 feet west of the Bay Bridge toll plaza.

The four marine foundations located in the Bay west of the shoreline are spaced approximately 300 feet apart. An additional foundation, Pier E23, is located on land and within the Commission’s 100-foot shoreline band, directly adjacent to the shoreline. The site is within a 45-acre area of the former Oakland Army Base proposed for redevelopment as a waterfront park called Gateway Park. Planning is underway for the park’s development by a consortium of nine agencies. This area is designated as a Waterfront Park, Beach Priority Use Area in the Bay Plan.

Permit Background

On November 20, 2001, the Commission issued BCDC Permit No. 2001.008.00, which authorized Caltrans to construct the new East Span of the Bay Bridge. The new bridge, located just north of the original East Span, opened for vehicular traffic on September 2, 2013. The original East Span, completed in 1936, was supported by 21 in-water piers (Piers E2 through E22), as well as land-based piers and bents at Yerba Buena Island and in Oakland.

BCDC Permit No. 2001.008.00 required Caltrans to:

“Completely remove the existing East Span of the [Bay Bridge] covering approximately 12.5 acres of high-level suspended fill for the bridge deck, trusses and girders and approximately 78,829 cubic yards of solid fill of the support piers and footings and pier fenders. All material from the existing East Span shall be removed and disposed of at an authorized location outside the Commission’s jurisdiction. The permittee shall remove all pilings, support piers and footings to at least 1.5 feet below the existing mudline, and shall restore the affected areas to the original or existing contours and approximate soil composition. Prior to removal of the existing East Span, the permittee shall prepare and submit a removal plan to be approved by or on behalf of the Commission to ensure that the removal plan does not adversely impact Bay-related resources, endangered species, navigation and public health and safety and that sufficient safeguards are included to protect human safety and capture all demolition debris and related substances.”

The complete removal of the existing Bay Bridge East Span structure from the Bay was also determined by the Commission to be appropriate to partially mitigate for fill impacts associated with the construction of the new East Span. Since the issuance of the original permit, 16 of the 21 in-water piers (Piers E3 through E18) have been removed. The original permit has been amended to allow remnant portions of Piers E3 through E18 and some resulting rubble to remain in place below the mudline only.

At the time of issuance of the permit, it was anticipated that demolition of the original East Span of the Bay Bridge could involve cofferdams, pile driving and mechanical dismantling. Starting in 2011, Caltrans began working with BCDC and other agencies to explore the possibility of using controlled blasting to demolish the pier foundations. This method was authorized by BCDC first as a demonstration project for Pier E3, under Material Amendment No. Thirty-Eight. On August 18, 2016, the Commission authorized the controlled blasting of Piers E4 through E18, through Material Amendment No. Forty-One. Amendment Nos. Thirty-Nine, Forty, and Forty-Two were also related to demolition work on these piers and were approved administratively. Caltrans conducted controlled blasting of Piers E4 and E5 in 2016, and Piers E6 through E18 in 2017. Given the novel form of demolition, extensive monitoring was required related to potential biological, hydroacoustic, water quality, hydrographic and sedimentation impacts of the blasts. Caltrans briefed the Commission on the results of this monitoring most recently on April 19, 2018 and its report concluded that monitoring results showed that “avoidance and minimization measures...successfully reduced impacts on environmental resources to levels below previously agreed upon thresholds.”

Currently, five in-water piers remain in the Bay (Piers E2, E19, E20, E21, and E22), with one additional on land (Pier E23). The removal of these piers remains a permit requirement to mitigate for the Bay fill resulting from construction of the new East Span.

Project Description

Project

Details: The permittee, the California Department of Transportation, proposes Amendment No. Forty-Four to BCDC Permit No. 2001.008.00 to authorize the following activities:

At Yerba Buena Island:

In the Bay:

- a. Construct a 5,246-square-foot (43-foot by 122-foot) observation deck atop Pier E2 (4,920 square feet and 10,300 cubic yards of retained solid fill), along with a 2,280-square-foot (19-foot by 120-foot) pedestrian bridge, 42-inch-tall railings, lighting, and site furnishings including seating, tables, and interpretive signs.

Within the 100-foot shoreline band:

- a. Construct an approximately 1,900-square-foot landing area and abutment with an ADA-compliant sloped walkway and stairs to provide access to the pedestrian bridge;
- b. Elevate the grade up to approximately 3.5 feet above existing grade, and construct an approximately 2,700-square-foot pedestrian plaza, including an approximately 1,800-square-foot turnaround area for maintenance vehicles;
- c. Construct interim parking and public access features for use during landfill site closure, including: (1) an approximately 6,242-square-foot portion of a temporary gravel road; (2) an approximately 564-square-foot portion of ADA parking and an ADA-compliant passenger drop-off area; (3) an approximately 612-square-foot portion of a permeable hard surface sidewalk; and (4) a fence on the bayward side of the gravel road and pedestrian pathway to Pier E2;
- d. Remove the interim improvements, above, following landfill site closure, and construct final parking and public access features;
- e. Install a movable barrier at the eastern end of the parking area to restrict vehicle access to the pedestrian pathways and Pier E2;
- f. Elevate the grade up to approximately 3.5 feet above existing grade, and construct an approximately 12-foot-wide, 300-foot-long shared-access path from the parking area to the pedestrian plaza consisting of a 6-foot-wide concrete path and adjacent 6-foot-wide permeable hard surface path;
- g. Install public access improvements such as bicycle racks, waste bins, interpretive and wayfinding signage, lighting, and power;

- h. Install shoreline protection consisting of: (1) an approximately 170-foot-long, 1,410-square-foot retaining wall and riprap south of the Pier E2 abutment; and (2) an approximately 60-foot-long, 430-square-foot retaining wall and riprap north of the Pier E2 abutment;
- i. Install water, sewer, and electrical lines under the road and pedestrian pathway; and
- j. Extend the time authorized for completion of shoreline protection between the Pier E2 landing and the shoreline southeast of the Torpedo Building, to restore and improve conditions after the placement and removal of a temporary trestle in the Bay and its supporting berm in the 100-foot shoreline band authorized through plan review associated with Amendment Nos. Twenty-Five and Thirty-Seven.

At Yerba Buena Island, outside of BCDC's jurisdiction, the project would also include construction of interim public access features (13 standard parallel parking spaces, a portion of a gravel road, a portion of the permeable hard surface pathway adjacent to the gravel road and parking spaces, a portion of the fence bayward of the gravel road, and a portion of a drainage swale), final public access features (a portion of the final parking area and road, a drainage swale, and sidewalks), and a retaining wall at the pump station.

At the Oakland Touchdown:

In the Bay:

- a. Construct a 600-foot-long, 16,550-square-foot public access pier supported by Piers E21, E22, and E23 (3,290 square feet and 2,270 cubic yards of solid fill) and 12 36-inch-diameter steel piles filled with concrete (80 cubic yards and 120 square feet of solid fill), with approximately 42-inch-tall railings, lighting, and site furnishings including seating, tables, and interpretive signage;
- b. Demolish Pier E19 (2,000 square feet and 1,370 cubic yards) and Pier E20 (1,850 square feet and 1,270 cubic yards) through the use of controlled blasting, to an elevation no higher than three feet below the lowest elevation of the mudline adjacent to and outside the scour pit surrounding each former pier footprint, resulting in approximately 3,800 cubic yards of debris assuming a bulking factor;
- c. Remove approximately 1,400 cubic yards of debris resulting from the demolition of Piers E19 and E20 and dispose in a location outside the Commission's jurisdiction; and
- d. Following debris removal, dispose of the remaining 2,400 cubic yards of demolition debris from Piers E19 and E20 within the footprint of the remnant structures to an elevation no higher than three feet below the lowest elevation of the mudline adjacent to and outside the scour pits.

Within the 100-foot shoreline band:

- a. Retain Pier E23 (990 square feet);
- b. Construct an approximately 200-foot-long accessible, sloped walkway to the public access pier and portion of pathways connecting to the Bay Trail at the landing of the new East Span bicycle path, totaling 9,540 square feet; and
- c. Install public access improvements such as bicycle racks, waste bins, interpretive and wayfinding signage, and lighting.

At the Oakland Touchdown of the Bay Bridge bicycle and pedestrian path outside of BCDC's jurisdiction, the project would include construction of the remaining portion of pathways connecting the observation area to the Bay Trail at the landing of the Bay Bridge new East Span bicycle and pedestrian path, and the installation of pathway lighting and a vault toilet.

Bay Fill:

Compared to the old East Span of the Bay Bridge, construction of the new span authorized by the amended permit results in more fill suspended over the Bay (a net increase of 33.55 acres), but less volume of solid fill in the Bay (a net decrease of 21,148 cubic yards). This is because the new bridge has a wider roadway but requires fewer marine foundations to support the structure (Table 2).

The proposed project would result in a net increase in the amount of Bay fill compared to the project authorized in the existing amended permit. The amended permit authorized and required removal of the entire former East Span, including those marine foundations proposed to be retained as part of the proposed project, and did not authorize the addition of new fill for public access piers.

The proposed project includes approximately 12,570 cubic yards and 8,210 square feet of retained fill (Piers E2, E21, and E22), and 80 cubic yards and 18,355 square feet of new fill, for a total of 12,650 cubic yards and 26,565 square feet of retained and new fill (see Table 1).

The project would also result in the removal of Piers E19 and E20, for a total of 2,640 cubic yards of volume restored within the water column above mudline. The removal of Piers E19 and E20 was accounted for in the fill removal originally required by the permit, but the piers would be removed via controlled implosions rather than through mechanical means as originally authorized.

In summary, the proposed amendment would change the total amount of Bay fill for the overall Bay Bridge project as follows: There would be an overall reduction in the volume of solid fill (net removal of 8,498 cubic yards) and an overall increase in the surface area of suspended and solid (net fill increase of 34.16 acres).

	Volume of Solid Fill (cubic yards)	Area of Suspended and Solid Fill (square feet)
Retained Fill		
Pier E2 (Yerba Buena Island)	10,300	4,920
Piers E21 and E22 (Oakland)	2,270	3,290
Total Retained Fill	12,570	8,210
New Fill		
Pedestrian Bridge (Yerba Buena Island)	0	1,805
Pedestrian Bridge and Support Piles (Oakland)	80	16,550
Total New Fill	80	18,355
Total Retained + New Fill	12,650	26,565

Table 2. Comparison of Project with Originally Authorized Fill

	Solid Fill			Solid and Suspended Fill		
	Fill Placed (cubic yards)	Fill Removed (cubic yards)	Net Fill (cubic yards)	Fill Placed (acres)	Fill Removed (acres)	Net Fill (acres)
New East Span Construction	57,681	--	57,681	46.05	--	46.05
Original Bridge Demolition	--	78,829	-78,829	--	12.5	--
Net Bay Fill Originally Authorized	57,681	78,829	-21,148	46.05	12.5	33.55
New East Span Construction	57,681	--	57,681	46.05	--	46.05
Bridge Demolition Minus Pier Retention	--	66,259	-66,259	--	12.31	-12.31
New Bay Fill from Project	80	--	80	0.42	--	0.42
Net Bay Fill Proposed by Project	57,761	66,259	-8,498	46.47	12.31	34.16

Public

Access: The proposed project would result in the construction of approximately 2.45 acres of new public access areas with approximately 1.29 acres of public access within BCDC's jurisdiction.

Table 3. Proposed New Public Access				
Type of Public Access	Total Public Access (Square Feet)	Total Public Access (Acres)	Public Access Within BCDC's Jurisdiction (Square Feet)	Public Access Within BCDC's Jurisdiction (Acres)
Yerba Buena Island				
Public Observation Area (Pier E2 + new structures)	7,610	0.17	7,610	0.17
Roads, parking, pathways, sidewalks (interim)	30,476	0.70	18,105	0.42
Roads, parking, pathways, sidewalks (final)	39,750	0.91	19,910	0.45
Subtotal (interim)	38,086	0.87	25,715	0.59
Subtotal (final)	47,360	1.09	27,520	0.62
Oakland				
Public Observation Area (Piers E21, E22, E23 + new structures)	19,100	0.44	19,100	0.44
Roads, parking, pathways, sidewalks	40,150	0.92	9,540	0.22
Subtotal	59,250	1.36	28,640	0.66
Total				
Total (interim)	97,336	2.23	54,355	1.25
Total (final)	106,610	2.45	56,160	1.29

Schedule

and Cost: Caltrans proposes to begin construction in July 2018. In-water work is anticipated to be completed by the end of 2018. Work on land may extend into 2019. In-water impact pile driving would be restricted to the period from June 1 to November 30, to avoid peak salmonid migration periods. Controlled blasting would be restricted to the period from September 1 to November 30. The estimated project cost is \$33,500,630.

Staff Analysis

Issues Raised: The staff believes that the application raises two primary issues, specifically: (1) whether the project would be consistent with the Commission's law and policies on allowable Bay fill, including public benefit versus detriment, safety of fills, climate change, and natural resources; and (2) whether maximum feasible public access is provided consistent with the project, and if the project is otherwise consistent with Bay Plan policies on public access, recreation, and appearance, design, and scenic views.

- I. **Fill.** The Commission may allow fill only when it meets the requirements identified in Section 66605 of the McAteer-Petris Act, which states, in part, that: (a) fill "should be authorized only when public benefits from fill clearly exceed public detriment from the loss of the water areas" and fill "should be limited to water-oriented uses (such as... water-oriented recreation, and public assembly...)" or "minor fill for improving shoreline appearance and public access"; (b) fill in the Bay should be approved only when "no alternative upland location" is available; (c) fill should be "the minimum amount necessary to achieve the purpose of the fill"; (d) "the nature, location, and extent of any fill should be such that it will minimize harmful effects to the bay area, such as, the reduction or impairment of the volume, surface area or circulation of water, water quality, fertility of marshes or fish or wildlife resources, or other conditions impacting the environment..."; and (e) that the fill is "constructed in accordance with sound safety standards..."

- A. **Public Benefit v. Detriment and Water-Oriented Use.** McAteer-Petris Act Section 66605 provides that fill should be limited to water-oriented uses, including recreation and public assembly, or minor fill to improve shoreline appearance or public access. The fill proposed by this project would provide for water-oriented recreational use at the sites, through the construction of new observation areas that serve visitors of varying interests and abilities, allowing the public to view and enjoy the Bay over the water, view the new Bay Bridge East Span from unique vantage points, and engage with the history of the original Bay Bridge East Span. The project sites at Yerba Buena Island and the former Oakland Army Base, which are former military sites, have limited public access. According to the applicant, current usage of the proposed project area, with the exception of nearby public access (e.g., Bay Bridge pedestrian and bicycle trail), is predominantly from construction, operations and maintenance, and on-site facility management by Caltrans and other stakeholder staff (i.e., East Bay Municipal Utility District, Port of Oakland, Pacific Gas and Electric Company, U.S. Coast Guard, Treasure Island Development Authority, and others). The purpose of the fill proposed is to construct two new piers for public access out over the Bay. New roads, parking, pathways, and sidewalks would be placed in the shoreline band and outside of the Commission's jurisdiction to provide a means for the public to reach the new public access piers.

The project would result in an increase of 12,650 cubic yards and 26,565 square feet of Bay fill over what is currently authorized by the amended permit. Most of this net fill increase comes from retaining the marine foundations that are currently required to be removed, in part to mitigate for the fill resulting from construction of the new East

Span. However, even with the additional fill proposed as part of the subject permit amendment, the Bay Bridge project would still result in a net reduction in the volume of Bay fill by 8,498 cubic yards. In terms of surface area of the Bay covered by fill, the full Bay Bridge project, including as modified by the proposed pier retention and additional fill, would result in a net fill gain of 34.16 acres—or approximately 0.61 acres more than originally authorized.

- B. **Alternative Upland Location.** The proposed fill activities serve water-oriented uses, including Bay viewing and recreation. The proposed project would repurpose existing bridge foundations in the Bay as foundations for new public access piers over the water. New fill in the Bay would also be required to construct the walkways of the public access piers. As the retention and repurposing of existing marine foundations occurs in the Bay, and the purpose of the project is to provide water-oriented recreation, no upland alternative is possible nor available.
- C. **Minimum Amount Necessary.** As proposed, the Bay fill that would result from retention of Piers E2, E21, and E22 totals 12,570 cubic yards of solid material over an approximately 8,210-square-foot area. The project would also result in a total of 80 cubic yards and 18,235 square feet of new fill to construct new public access observation areas on top of the retained bridge foundations.

Caltrans evaluated multiple design alternatives for the public access areas, including concepts on the Oakland side that considered using hundreds of piles to support these structures, “as would be typical for public access structures of this nature like Piers 7 or 14 in San Francisco.” In order to place the minimum fill necessary for creating the public access pier at the former Oakland Army Base, according to the applicant, the project would be designed to “incorporate as few piles as possible and would use the minimal diameter required to support the structure’s load.”

At Yerba Buena Island, the design of the public access area on top of Pier E2 would not use piles to support the pedestrian bridge connecting Pier E2 with the landing area, minimizing the amount of solid fill necessary for the project.

Further, although retaining walls and riprap would be placed at Yerba Buena Island to support grade changes and public access structures and to accommodate anticipated sea level rise, the project design has been modified to place these features only within the 100-foot shoreline band, rather than within the Bay.

- D. **Effects on Bay Resources.** In addition to Section 66605(d) of the McAteer-Petris Act regarding the impacts of fill on Bay resources, the Bay Plan contains related policies, cited below.
 - 1. **Fish and Wildlife.** The Bay Plan Fish, Other Aquatic Organisms and Wildlife Policy No. 4 states, in part, that “[t]he Commission should consult with the California Department of Fish and [Wildlife] and the U.S. Fish and Wildlife Service or the National Marine Fisheries Service whenever a proposed project may adversely affect an endangered or threatened plant, fish, other aquatic organism or wildlife species...and give appropriate consideration of (their) recommendations in order to avoid possible adverse impacts of a proposed project on fish, other aquatic organisms and wildlife habitat.”

Caltrans submitted a Biological Assessment (BA) to the National Marine Fisheries Service (NMFS) on the proposed project. The BA determined that the project may affect, and is likely to adversely affect, Sacramento River winter-run Chinook salmon or Central Valley spring-run Chinook salmon, Central Valley Steelhead Distinct Population Segment (DPS) or Central California Coast Steelhead DPS, and Southern DPS Green Sturgeon. The project may also adversely affect Essential Fish Habitat (EFH) in the Action Area, primarily through temporary impacts, with permanent impacts limited to shading from overwater structures and placement of piles. In addition, the BA determined that the project may affect, but is not likely to adversely affect, designated critical habitat for the federally-listed fish species noted above. The project would have no effect on Central California Coast Coho Salmon.

The impacts on listed species are primarily due to temporary effects (e.g., noise, sound pressure, turbidity) associated with the implosions of Piers E19 and E20, as well as noise from pile driving associated with construction of the public access pier at the former Oakland Army Base. Permanent effects would result from the placement of permanent fill and a pile-supported structure at the former Oakland Army Base and an over-water structure at Yerba Buena Island. The BA found that the permanent effects would be very small in the context of available habitat and would not preclude use of the area as listed species habitat.

In order to address these impacts, Caltrans would implement avoidance and minimization measures related to the controlled blasting of Piers E19 and E20, including: deploying a Blast Attenuation System to reduce blast pressures by approximately 80 percent; conducting the implosions between September 1 through November 30 and post-blast removal of debris between September 1 through December 15 to avoid highest concentrations of NMFS listed fish species; bird deterrence; debris management monitoring and minimization; and monitoring of sedimentation, birds, marine mammals, and water quality. Caltrans would report on the results of the implosion events.

In addition, Caltrans proposes to implement measures during construction to reduce the potential for adverse impacts to fish and wildlife, including worker environmental awareness training, establishment of Environmentally Sensitive Areas, trash control, prohibitions on firearms and pets, placement and staging of project-related equipment outside of eelgrass beds, Pacific Herring monitoring, stormwater and water quality BMPs, bird monitoring, and bird predation monitoring.

Caltrans would also implement measures to avoid and minimize impacts from pile driving on listed marine species, including the use of a marine energy attenuator (bubble curtain) during impact-driving, limitations on quantity and duration of pile proofing, use of pile-driving work windows, and hydroacoustic monitoring.

The NMFS Biological Opinion is not yet final, but Commission staff has consulted with NMFS staff. Since the submittal of the BA, Caltrans has provided NMFS with additional information clarifying that approximately 19,900 square feet of previously proposed new shoreline protection has been removed from the project description, describing mitigation previously implemented through the Bay Bridge project, and

identifying that Caltrans will implement eelgrass surveys, perform an impact analysis, and coordinate with NMFS regarding potential mitigation needs. NMFS has stated that, based on its review of this information, they do not expect to request substantive project modifications. Final determinations will be issued in the Biological Opinion.

On May 17, 2018, the California Department of Fish and Wildlife (CDFW) issued Incidental Take Permit (ITP) Amendment No. 7 to the existing ITP for the Bay Bridge project, for potential, temporary impacts on fish species and habitat protected by the California Endangered Species Act through pile driving and implosion of Piers E19 and E20. On May 24, 2018, the NMFS Office of Protected Resources issued an Incidental Harassment Authorization, for the harassment of marine mammals incidental to the proposed project.

2. **Subtidal Areas and Water Surface Area.** The Bay Plan Subtidal Areas policies state, in part, “[a]ny proposed filling...project in a subtidal area should be thoroughly evaluated to determine the local and Bay-wide effects of the project on: (a) the possible introduction or spread of invasive species; (b) tidal hydrology and sediment movement; (c) fish, other aquatic organisms and wildlife; (d) aquatic plants; and (e) the Bay’s bathymetry. Projects in subtidal areas should be designed to minimize and, if feasible, avoid any harmful effects.” The Bay Plan Subtidal Areas policies also state, in part, “[s]ubtidal areas that are scarce in the Bay or have an abundance and diversity of fish, other aquatic organisms and wildlife (e.g., eelgrass beds...) should be conserved. Filling, changes in use, and dredging projects in these areas should therefore be allowed only if: (a) there is no feasible alternative; and (b) the project provides substantial public benefits.”

In addition, the Bay Plan Water Surface Area and Volume policies state, in part, “[t]he surface area of the Bay and the total volume of water should be kept as large as possible in order to maximize active oxygen interchange, vigorous circulation, and effective tidal action. Filling and diking that reduce surface area and water volume should therefore be allowed only for purposes providing substantial public benefits and only if there is no reasonable alternative.”

Eelgrass beds exist outside of the project boundaries near the proposed project, including at Clipper Cove and U.S. Coast Guard Cove on the Yerba Buena Island side and off the Oakland shoreline. No eelgrass beds are present in the vicinity of Pier E2 at Yerba Buena Island. According to the applicant, in addition to previously mapped eelgrass beds, an approximately 0.17-acre eelgrass bed was confirmed to be located just between and south of Piers E22 and E23 in January 2018. The proposed project would result in approximately 0.07 acres of temporary impacts and 0.02 acres of permanent impacts to this eelgrass bed.

The RWQCB evaluated these impacts to eelgrass and found that the mitigation associated with the original Bay Bridge project was sufficient to address the Bay Bridge project’s impacts, including the impacts from the proposed pier retention project. This accounted for the mitigation discussed below as well as the avoidance

of approximately 4.1 acres of eelgrass and sand flat habitat impacts originally expected under the Bay Bridge project. As a result, the RWQCB did not require additional mitigation for eelgrass impacts.

To minimize impacts to eelgrass, the applicant has proposed eelgrass bed monitoring, and will also conduct a protocol-level eelgrass survey and impact analysis prior to construction of the public access pier at the former Oakland Army Base. Additional mitigation may be needed if the impact analysis indicates the structure will have permanent impacts to eelgrass.

Given the location of the Bay Bridge marine foundations in the Bay, there is not a feasible alternative to the proposed project that would retain these piers and provide public access without impacting eelgrass at the former Oakland Army Base. There is also not a reasonable alternative to this project that would provide similar over-water public access opportunities related to the history of the former Bay Bridge, without placing fill in the Bay. In addition, the project purpose is to provide water-oriented recreational opportunities that will be integrated with future parks and public access on the Bay shoreline, in the unique context of reuse and interpretation associated with the former Bay Bridge.

3. **Water Quality.** The Bay Plan Water Quality policies state, in part, that “[w]ater quality in all parts of the Bay should be maintained at a level that will support and promote the beneficial uses of the Bay as identified in the San Francisco Bay Regional Water Quality Control Board’s (RWQCB) Basin Plan...[and] the policies, recommendations, decisions, advice, and authority of the State Water Resources Control Board and the Regional Board should be the basis for carrying out the Commission’s water quality responsibilities.” Policy No. 3 states, in part, that “[n]ew projects should be sited, designed, constructed, and maintained to prevent or, if prevention is infeasible, to minimize the discharge of pollutants into the Bay...”

On April 30, 2018, the RWQCB accepted Caltrans’ request to modify the Waste Discharge Requirements for the Bay Bridge East Span Seismic Safety Project to include the retention of Piers E2, E21, E22, and E23 for public access. The RWQCB found that the proposed project would result in approximately 1.9 acres of new or reworked impervious surfaces and required Caltrans to submit a plan to treat stormwater runoff by December 31, 2018.

On May 31, 2018, the RWQCB accepted Caltrans’ Stormwater Pollution Prevention Plan (SWPPP), Materials Containment, Collection, and Handling Workplan (MCCHWP), and Dewatering Discharge Workplan (DDWP), for both the proposed pier retention project as well as the implosions of Piers E19 and E20.

The RWQCB has required that Caltrans submit a Sampling and Analysis Plan prior to underwater demolition of Piers E19 and E20. Additional approvals from the RWQCB and DTSC would also be needed prior to conducting work on Site 11 at Yerba Buena Island that involves grading or excavating soil, beyond work on the existing surface of Site 11 for access and equipment/materials storage that has been approved by the RWQCB.

4. **Mitigation.** BCDC Bay Plan Mitigation Policy No. 1 states, in part, that “[p]rojects should be designed to avoid adverse environmental impacts to Bay natural resources such as to water surface area, volume, or circulation and to plants, fish, other aquatic organisms and wildlife habitat, subtidal areas, or tidal marshes or tidal flats. Whenever adverse impacts cannot be avoided, they should be minimized to the greatest extent practicable. Finally, measures to compensate for unavoidable adverse impacts to the natural resources of the Bay should be required.”

In addition to removing the former Bay Bridge East Span as part of the mitigation for construction of the new East Span, the Bay Bridge permit required Caltrans to fund a \$15.5 million mitigation program to help offset expected impacts of the Bay Bridge new East Span construction. The original mitigation program included \$4 million for salmonid monitoring and restoration, \$1 million for Bay-wide eelgrass research, \$2.5 million (\$2.9 million including accrued interest) for eelgrass and sand flat restoration, and \$8 million (\$8.9 million including accrued interest) for Skaggs Island restoration in Sonoma County. Caltrans states that “[t]he [Bay Bridge] Project has considered and fully mitigated for the impacts from new construction in water and from bridge removal.” No additional mitigation is proposed to offset fill or environmental impacts.

Additional mitigation was not required by the RWQCB because the agency found that the original mitigation package was sufficient to cover additional impacts resulting from the proposed project.

- E. **Sound Safety Standards.** In addition to Section 66605(e) of the McAteer-Petris Act regarding the seismic and flooding standards by which fill is designed and constructed, the Bay Plan contains related policies, cited below. The Bay Plan Safety of Fills Policy No. 1 states, in part, “[t]he Commission has appointed the Engineering Criteria Review Board consisting of geologists, civil engineers specializing in geotechnical and coastal engineering, structural engineers, and architects competent to and adequately empowered to:... establish and revise safety criteria for Bay fills and structures thereon... [and]...review all except minor projects for the adequacy of their specific safety provisions, and make recommendations concerning these provisions....” The Bay Plan Safety of Fills Policy No. 4 states, in part, that “[a]dequate measures should be provided to prevent damage from sea level rise and storm activity that may occur on fill or near the shoreline over the expected life of a project....New projects on fill or near the shoreline should...be built so the bottom floor level of structures will be above a 100-year flood elevation that takes future sea level rise into account for the expected life of the project, be specifically designed to tolerate periodic flooding, or employ other effective means of addressing the impacts of future sea level rise and storm activity.”

Further, the Bay Plan Climate Change Policy No. 2 states, in part: “When planning shoreline areas or designing larger shoreline projects, a risk assessment should be prepared by a qualified engineer and should be based on the estimated 100-year flood elevation that takes into account the best estimates of future sea level rise and current flood protection and planned flood protection that will be funded and constructed when needed to provide protection for the proposed project or shoreline area. A range of sea

level rise projections for mid-century and end-of-century based on the best scientific data available should be used in the risk assessment. Inundation maps used for the risk assessment should be prepared under the direction of a qualified engineer. The risk assessment should identify all types of potential flooding, degrees of uncertainty, consequences of defense failure, and risks to existing habitat from proposed flood protection devices.” Climate Change Policy No. 3 state, in part, “[t]o protect public safety and ecosystem services, within areas that a risk assessment determines are vulnerable to future shoreline flooding that threatens public safety, all projects...should be designed to be resilient to a mid-century sea level rise projection.”

The Commission’s ECRB did not review the proposed project because the Commission staff determined that the fill did not raise significant safety issues. The applicant conducted geotechnical analyses regarding the construction of project components on Bay mud and on previously filled lands at Yerba Buena Island and the former Oakland Army Base, and has incorporated this information into the project design. The proposed fill is designed and would be constructed under the direction of qualified structural and civil engineers to meet current seismic safety standards.

The proposed retained and new fill in the Bay for public access takes sea level rise into account. The proposed public observation areas at both Yerba Buena Island and the former Oakland Army Base are designed with top of deck elevations at a height sufficient such that the bottom side of the structure will not be flooded in a 100-year storm with 66-inches of sea level rise. Sea level rise is discussed further in Section II-A-4, below, as it relates to specific public access features.

- F. **Valid Title.** The project site, including the area located upland of the Bay, is within the Caltrans right-of-way and on structures owned by Caltrans.

The Commission should determine whether the proposed project is consistent with the McAteer-Petris Act sections and relevant San Francisco Bay Plan policies regarding fill in the Bay.

II. Public Access

- A. **Maximum Feasible Public Access.** In assessing whether the proposed project would provide maximum feasible public access consistent with the proposed activities, the Commission relies on the McAteer-Petris Act, the Bay Plan policies, and relevant court decisions. When the activity under consideration is proposed by a public agency, such as Caltrans, the Commission also evaluates whether the proposed public access is reasonable in light of the project scope.

Section 66602 of the McAteer-Petris Act states, in part, that “...existing public access to the shoreline and waters of the...[Bay] is inadequate and that maximum feasible public access, consistent with a proposed project, should be provided.” In addition, the Bay Plan Public Access policies state, in part, that “a proposed fill project should increase public access to the Bay to the maximum extent feasible...” and that “access to and along the waterfront should be provided by walkways, trails, or other appropriate means and connect to the nearest public thoroughfare where convenient parking or public transportation may be available.”

1. **Existing and Required Public Access.** Public access, shoreline views, and views of the Bay currently exist near both the Yerba Buena Island and former Oakland Army Base sites. The Bay Bridge pedestrian and bicycle trail runs along the new East Span, connecting Yerba Buena Island and the former Oakland Army Base.

At Yerba Buena Island, public access is required near the terminus of the Bay Bridge pedestrian and bicycle trail and along Southgate Road, pursuant to the BCDC permit authorizing the construction of the new Bay Bridge East Span (BCDC Permit No. 2001.008.43). This includes an area connecting the Bay Bridge trail with public streets on Yerba Buena Island, a public access trail, planting, signage, and public access amenities. These public access improvements would contribute to connecting the project site to the Bay Bridge pedestrian and bicycle trail.

At Oakland, the existing Bay Bridge permit requires 4.5 acres of public access near the Oakland Touchdown, including a 4.2-acre parcel to become part of Gateway Park, a 43-stall parking lot and vehicle turnaround, a bridge connector path and landing that connects the Bay Bridge pedestrian and bicycle trail with the parking lot and trail system leading to Emeryville and Oakland, planting, and public access signs. The 4.2-acre parcel will be available exclusively for public access and integrated into Gateway Park. The bridge connector path and landing, planting, and public access signs have been completed. The 43-stall parking lot has not yet been implemented, but a further amendment request to the Bay Bridge permit is expected to resolve this item.

2. **Integration with Other Planned Public Access.** The proposed project site in Oakland is within a larger area of the former Oakland Army Base proposed to be repurposed as Gateway Park, currently in the planning stages. EBRPD would operate the park once developed. The Gateway Park Draft Environmental Impact Report identifies the planned construction of a public pier at the location of the proposed public access pier at Piers E21 through E23, which would integrate with the remainder of Gateway Park. The proposed project would be in line with plans for Gateway Park through the development of a public access pier at the alignment of the former Bay Bridge.

The proposed project site at Yerba Buena Island is adjacent to the historic Torpedo Building, which is envisioned for future restoration and reuse by TIDA. While the future programming of the Torpedo Building is not known, the proposed project would construct access routes and provide amenities for the observation area at Pier E2 that could also be used by the public attending future programming at the Torpedo Building.

3. **Proposed Public Access Areas.** The proposed project would involve the construction of public access observation areas atop remaining foundations of the former Bay Bridge East Span, as well as public access facilities at the Yerba Buena Island and former Oakland Army Base locations. Public access features are proposed both within and outside of the Commission's jurisdiction at both Yerba Buena Island and the former Oakland Army Base. In total, the proposed project would result in the construction of approximately 2.45 acres of new public access areas, upon final build-out, of which 1.29 acres would be located within BCDC's jurisdiction.

The following is a brief summary of the proposed public access areas that would be newly constructed or repurposed as part of the proposed project:

Yerba Buena Island. On Yerba Buena Island, the proposed project consists of a public access observation area at Pier E2, a pedestrian bridge connecting the observation area to the landing plaza, a shared access path, interim and final parking areas including bicycle parking, and wayfinding signage from other areas of Yerba Buena Island.

- a. **Public Access Observation Area.** The public access observation area would consist of the marine foundation structure (Pier E2) and a 2,280-square-foot (19-foot by 120-foot) pedestrian bridge linking Yerba Buena Island to Pier E2, with a 15-foot-wide pedestrian walkway. The top portion of the Pier E2 structure will be mechanically removed (as authorized under Amendment No. 43) to bring the structure closer to the shoreline elevation. The proposed project would construct a 5,246-square-foot observation deck atop the remaining Pier E2 structure. The proposed observation deck would be 43-feet wide, 122-feet long, and 19 feet above current-day mean sea level. A 42-inch-tall railing, including reused portions of old Bay Bridge steel, would be constructed around the observation deck and pedestrian bridge, and lighting would be integrated into the railing. The observation deck would also include benches, a communal table, unit pavers, and interpretive signage.
- b. **Plaza and Landing Area.** An elevated plaza area would be constructed at the landing of the public access pedestrian bridge. The plaza would connect to a shared access path via concrete stairs and an accessible concrete sloping walkway. Wide wooden stairs (“seat steps”) would wrap around two sides of the elevated plaza. The elevated plaza would include a planting area with a specimen tree and a high-table seating area facing the water, constructed from re-purposed bridge steel. The landing area would also include pedestrian lighting and unit pavers consistent with the observation area and pedestrian bridge. Retaining walls with a minimum six-inch curb would be located on the water-side of the plaza, steps, and sloped walkway to hold back the additional earth needed to elevate the plaza to meet the bridge landing.
- c. **Shared Access Path.** As part of this project, Army Road would be reconstructed from its intersection with Northgate Road (adjacent to the USCG base entrance) and terminate in a shoreline parking area, discussed below. At the terminus of the road and parking area, a 12-foot-wide shared access path would lead to the pier and the Torpedo Building. A movable barrier would be installed at this location to limit vehicle circulation to authorized vehicles, while still allowing bicycle and pedestrian circulation. The shared access path of concrete and a compacted, stabilized, accessible surface would be graded up from the existing elevation of approximately +10’ to +16.7’ NAVD88. The shared access path will grade back down to the Torpedo Building’s elevation beyond the bridge landing plaza. A maintenance vehicle turnaround would be provided in front of the Torpedo Building, which will remain at its existing grade (+10’ NAVD88).

- d. **Interim Shoreline Parking and Access.** Due to contamination at Installation Restoration Site 11, interim parking and access features would be provided until such time as landfill closure is complete and permanent improvements can be constructed. A gravel access road and parking area would be constructed on top of a portion of the Site 11 area, with 13 parallel parking spaces. An 8-foot-wide permeable hard surface path would run along the uphill (landward) side of the gravel road and parking, connecting Northgate Road to the public observation area and the Torpedo Building, and allowing for pedestrian and cyclist access to the site. An 8-foot-wide concrete sidewalk, ADA parking space, and ADA drop-off area would be constructed at the terminus of the gravel road and parking area, connecting with the shared access path. A temporary fence would be constructed along the Bayward edge of the gravel road and parking area, to prevent the public from accessing the remainder of the Site 11 contaminated area.
- e. **Final Shoreline Parking and Access.** Once landfill closure at Site 11 is complete, the interim parking and access features would be replaced with a road and parking area. Conceptually, the full build-out could include a 25-space parking lot with accessible spaces. The plans and features proposed in the final shoreline parking area may change pending the outcome and any restrictions associated with the closure of Site 11.

Former Oakland Army Base. The portion of the proposed project in Oakland consists of an approximately 600-foot-long public access pier built atop three foundation structures (Piers E21, E22, and E23), and on-land improvements to connect to the planned Gateway Park and the Bay Bridge bicycle and pedestrian path.

- a. **Public Access Pier.** An approximately 600-foot-long, 15,340-square-foot public pier would be constructed between the vertical caissons of Piers E21 through E23, comprising of two 290-foot spans that would be pile-supported in between the existing foundations. The public pier walkway would be approximately 26 feet in width between Piers E21 and E23, with a 45-foot-wide bulb at the end of the walkway over Pier E21. Public amenities on the pier would include seating, lighting, interpretive signage, a picnic table, flexible use space, and waste bins. Railings would be provided, with integrated lighting.
- b. **Pier Approach at Gateway Park.** An approximately 200-foot-long accessible, sloped walkway would be constructed from cellular concrete to connect to the pier from existing grade of +10.3' NAVD88 up to the pier elevation at +20.3' NAVD88. The sides of the embankment supporting the sloped walkway would be hydroseeded. Bicycle racks would be provided along the walkway.
- c. **Access to Bay Bridge Bicycle and Pedestrian Trail and Upland Amenities.** A 12-foot-wide, 925-foot-long pathway would be constructed to connect the pier approach with the landing area of the Bay Bridge bicycle and pedestrian trail. A vault toilet would be installed near the new pathway.

BCDC staff has not yet reviewed a full design of surfaces, furnishings, plantings, and other site elements due to the project timing, leaving some design details unresolved.

4. **Sea Level Rise and Flooding.** The Commission's Bay Plan Public Access Policy No. 5 states that "public access should be sited, designed, managed and maintained to avoid significant adverse impacts from sea level rise and shoreline flooding." Policy No. 6 states, in part, "any public access provided as a condition of development should either be required to remain viable in the event of future sea level rise, or equivalent access consistent with the project should be provided nearby."

The proposed public observation areas are designed with top of deck elevations at a height sufficient such that the bottom side of the structure will not be flooded in a 100-year storm with 66 inches of sea level rise.

- a. **Yerba Buena Island.** According to the Federal Emergency Management Agency (FEMA), current 100-year-flood elevation (BFE) for the project site is +9' NAVD88. As proposed, the developed site elevations along this area of the shoreline would be: +22.3' NAVD88 at the Pier E2 observation deck, between +20.3' and +22.3' NAVD88 for the pedestrian bridge, and +17.2' NAVD88 at the landing area. The Torpedo Building (not part of the proposed project) will remain at existing grade (+10' NAVD88). For site planning purposes, the project proponents have estimated 66 inches of sea level rise by the end of the century (BFE+66"SLR = +14.5' NAVD88). The proposed Pier E2 observation area and pedestrian bridge have a design life of approximately 75 years and would not be flooded by 66 inches of sea level rise. The final road, parking lot, and pathways all have a design life of 20 years. The interim gravel road and parking area are intended to remain in place until landfill closure at Site 11, anticipated to be approximately 3-5 years or more, pending regulatory processes. The interim parking area would be sloped and would range from approximately +21.3' NAVD88 near the entrance to approximately +9.2' NAVD88 near the shoreline. The elevation of the final parking area is unknown, pending the outcome of Site 11 closure requirements. The portion of the landing area containing the Torpedo Building would be flooded by the end of the century.
- b. **Former Oakland Army Base.** According to FEMA, current 100-year-flood elevation (BFE) for the project site is +9' NAVD88. As proposed, the top of the deck on Piers E21 through E23 would be at an elevation of +20.3' NAVD88, and the approach from E23 to the landward end where it meets low grade is +10.3' NAVD88. The proposed pier at Piers E21 through E23 has a design life of 75 years and would not be flooded by 66 inches of sea level rise. The proposed pier approach walkway also has a design life of 75 years. The portions of the pier approach and path connecting to the Bay Bridge bicycle and pedestrian trail landing at existing grade would be inundated by the end of the century – however, the path is intended to serve only until Gateway Park is developed.

5. **Safety of Public Access and Interim Use.** Bay Plan Public Access Policy No. 7 states, in part: “Public access improvements provided as a condition of any approval should...provide for the public’s safety and convenience.”

Installation Restoration Site 11, a former Naval landfill, is located on Yerba Buena Island in the area proposed for parking, roadways, pathways, and stormwater plantings. Site 11 is included in the Navy’s Base Realignment and Closure Program (BRAC) for the Naval Station Treasure Island cleanup plan. The site includes contaminants such as petroleum hydrocarbons and heavy metals. While the creation of public access on top of existing ground at Site 11 is not anticipated to expose the public to contaminants, provided strategies are implemented to avoid or minimize disturbance of the site, the RWQCB and DTSC have found that a workplan to address contamination at Site 11 is necessary prior to excavation activities. Prior to site closure, efforts should also be made to minimize public contact with potentially contaminated soils outside of areas covered by gravel or other interim surfaces. To this end, a temporary fence would be constructed at the edge of the interim gravel parking lot, to prevent the public from accessing other areas of Site 11 prior to closure. An interim parking area plan would be implemented in advance of Site 11 closure, which would create a gravel area and public access amenities on top of Site 11, without the need for site excavation. A final parking area would be installed after the contamination issues at Site 11 have been resolved.

6. **Barrier Free Access.** Bay Plan Public Access Policy No. 7 states, in part: “Public access improvements provided as a condition of any approval... should permit barrier free access for persons with disabilities to the maximum feasible extent...”

According to the applicants, both of the public access areas at Yerba Buena Island and at the former Oakland Army Base are designed for accessibility, including meeting ADA and ABA requirements. For example, the landing at Pier E2 would include an ADA-compliant sloped walkway on its southern end, connecting the concrete sidewalk to the Pier E2 pedestrian bridge. ADA parking and drop-off areas would be provided in both the interim and final parking areas at Yerba Buena Island. The public pier approach at the former Oakland Army Base would also be an accessible sloped walkway.

7. **Operations and Maintenance.** Bay Plan Public Access Policy No. 7 states, in part: “Public access improvements provided as a condition of any approval...should include an ongoing maintenance program.”

Caltrans is coordinating with the Treasure Island Development Authority (TIDA) and the City and County of San Francisco (CCSF) to develop formal commitments requiring TIDA to provide operations and maintenance of the proposed public access facilities on Yerba Buena Island, with funding to be provided by the Bay Area Toll Authority (BATA). Until such commitments are in place, Caltrans will be the owner and operator of the proposed facilities.

Caltrans is also working closely with the East Bay Regional Park District (EBRPD) and is in the process of establishing an operations and maintenance agreement with the EBRPD for proposed public access facilities at the former Oakland Army Base site.

Funding for operations and maintenance by EBRPD is planned to be provided through BATA. During construction and in the interim before those agreements are executed, Caltrans will maintain ownership, management and operations responsibilities.

B. Recreation

1. **Bay Plan Recreation Policies.** Bay Plan Recreation Policy No. 1 states, in part: “Diverse and accessible water-oriented recreational facilities, such as marinas, launch ramps, beaches, and fishing piers, should be provided to meet the needs of a growing and diversifying population, and should be well distributed around the Bay and improved to accommodate a broad range of water-oriented recreational activities for people of all races, cultures, ages and income levels.” In addition, Bay Plan Recreation Policy No. 3 states, in part: “Sites, features or facilities within designated waterfront parks that provide optimal conditions for specific water-oriented recreational uses should be preserved and, where appropriate, enhanced for those uses, consistent with natural and cultural resource preservation.” With regard to uses in waterfront parks, Bay Plan Recreation Policy No. 4 states, in part: “...parks should emphasize hiking, bicycling, riding trails, picnic facilities, swimming, environmental, historical and cultural education and interpretation, viewpoints, beaches, and fishing facilities,” and that “[i]nterpretive information describing natural, historical and cultural resources should be provided in waterfront parks where feasible.” Additionally, “[p]ublic parking should be provided in a manner that does not diminish the park-like character of the site. Traffic demand management strategies and alternative transportation systems should be developed where appropriate to minimize the need for large parking lots and to ensure parking for recreation uses is sufficient.”

Bay Plan Recreation Policy No. 7 also states: “Because of the need to increase the recreational opportunities available to Bay Area residents, small amounts of Bay fill may be allowed for waterfront parks and recreational areas that provide substantial public benefits and that cannot be developed without some filling.”

The proposed project would provide new access to the Bay, through the construction of over-the-water public observation areas that allow for public assembly. At both Yerba Buena Island and the former Oakland Army Base, the project would provide amenities for walking, running, cycling, picnic facilities, and historical education and interpretation, in line with the Bay Plan policies for waterfront parks. The proposed project would facilitate connections with the Bay Bridge bicycle and pedestrian trail (also designated Bay Trail) at both project sites. Bicycle racks would also be provided at both Yerba Buena Island and the former Oakland Army Base, which would encourage alternative transportation to the sites, in conjunction with Bay Bridge bicycle and pedestrian trail connections.

2. **Waterfront Park Priority Use.** Gateway Shoreline Park is identified in Bay Plan Maps Nos. 4 and 5 as a Waterfront Park, Beach Priority Use Area, with policies that state: “Develop gateway park at Bay Bridge touchdown with gracious pedestrian and bicycle access to the Bay Bridge. Incorporate viewing, picnicking, non-motorized

small boat launching and interpretation of current and historic transportation infrastructure and natural and cultural factors. Protect eelgrass beds and nearby endangered species habitat.”

The proposed project was designed in such a way that the public access pier and pathway would be compatible with and fit within the plans for Gateway Park and would provide opportunities for viewing, picnicking, and interpretation of historic trans-Bay transportation infrastructure. Proposed protective measures for eelgrass beds are discussed in Section I-D-2.

Yerba Buena Island, south of the Bay Bridge, is also identified in Bay Plan Maps Nos. 4 and 5 as a Waterfront Park, Beach Priority Use Area, with policies that state: “When no longer controlled by the federal government, redevelop for recreational use. Protect harbor seal haul-out and pupping site where harbor seals rest, give birth and nurse their young. Projects allowed only if protective of harbor seals and other sensitive wildlife.”

The proposed project would develop the Yerba Buena Island site for public access and recreational use by constructing the Pier E2 observation area and associated public access. The harbor seal haul-out that is located on the southern portion of Yerba Buena Island and west of the lighthouse and U.S. Coast Guard base is away from the project location.

- C. **Appearance, Design, and Scenic Views.** The Bay Plan Appearance, Design, and Scenic Views policies state, in part, that “all bayfront development should be designed to enhance the pleasure of the user or viewer of the Bay” and that “[m]aximum efforts should be made to provide, enhance, or preserve views of the Bay and shoreline, especially from public areas...” Furthermore, “[s]tructures and facilities that do not take advantage or complement the Bay should be located and designed so as not to impact visually on the Bay and shoreline. In particular, parking areas should be located away from the shoreline. However, some small parking areas for fishing access and Bay viewing may be allowed in exposed locations.”

The proposed Pier E2 observation area at Yerba Buena Island and the proposed public pier at the Oakland site would provide over-water viewing of the Bay and would incorporate elements into the design that use and recall the former East Span of the Bay Bridge. At the Oakland site, parking areas (not part of the proposed project) are located inland of the proposed public access features. While the parking area at Yerba Buena Island is along the shoreline, it is farther inland than the public access area at Pier E2 and provides views of the Bay in addition to providing parking at a fairly remote location without other public parking options.

The Commission should determine whether the proposed project is consistent with the Bay Plan policies regarding public access, recreation, and appearance, design and scenic views.

III. Review Boards

1. **Design Review Board.** The DRB received a briefing on this project on November 6, 2017. At that time, Piers E19 and E20 were also considered for retention for habitat purposes; they have since been removed from the project proposal and are planned for implosion. The DRB raised a number of questions and issues about the public access portions of the project, including: (1) the importance of ensuring future maintenance of the sites; (2) the need for additional information on the path cyclists would take from the bridge to Pier E2 on Yerba Buena Island; (3) the importance of ensuring public use of the spaces and making both sites destinations through connections with possible destination points in the area, recreational and educational opportunities, and identity-generating programming; (4) the possibility of using in-ground plantings rather than elevated planters to reduce ongoing maintenance needs; (5) the need to ensure that materials are durable and provide an appropriate linkage to the former Bay Bridge; and (6) exploring the possibility of water access in the form of a kayak landing at the proposed pier in Oakland.

The DRB reviewed the proposed project again on February 5, 2018. For the public access area at Yerba Buena Island, the DRB had questions and comments, in part, regarding the need for a strong relationship with the Torpedo Building; the use of materials relating to the former bridge and ensuring the design is sufficiently bold and emphatic to draw the public to the site; potential issues associated with loose furnishings (such as chairs); the small scale of the amphitheater area and the railing details seeming out of place; the need for basic infrastructure given the remote location (toilet and water); site maintenance; providing a way for the public to walk to the water; clearly marking routes to the site; providing amenities to encourage bicyclists; and minimizing height and view impacts of the proposed security fence. The DRB also provided recommendations to: (1) be ready for the groups that will come there; (2) make it work for families and children; (3) figure out restrooms of some sort; (4) increase bicycle parking and welcome cyclists; (5) find an easy way to handle large numbers of visitors; (6) make the design tough, bold, durable, and responsive to the scale and engineering context of the bridge above the project; (7) put the plants and trees in the ground, with a less ornamental design; (8) have a future idea about the use of the Torpedo Building, but also bring it into this project using the public arts that are coming to Treasure Island, and figure out some way to tell the story of the building and be part of the experience of this place; (9) include a concessionaire to provide food for visitors while raising funds for the Torpedo Building; and (10) design with hardiness in mind (e.g., railings, furnishings, materials).

For the public access area at the former Oakland Army Base, the DRB had questions and comments, in part, on the details and environmental impacts of the proposed pile-supported public access pier; the ability to raise the pier if necessary for sea level rise; the importance of integrating the public access with plans for Gateway Park, including in construction of the pier approach and ability to access the northwest side of the park; the distance to and availability of parking; providing additional amenities to encourage bicyclists; operations and maintenance; creating programming designed for school fieldtrips; the need for programming of the public access pier with appropriate activities

and amenities, and community input on the design process and activity programming; the desire for shade and wind structures; the importance of basic amenities before Gateway Park is complete, including restroom facilities; the use of the Bridge Yard Building; the need for recreational water access, fishing, and the ability for pedestrians to walk to the water's edge; and the use of materials and design to relate to the former bridge. They commented on the lack of public input into the programming of the pier, and the need for constituent input on the design of the public access amenities. As such, they recommended a design strategy that would allow additional structures such as shade canopies and other amenities like external power to be installed on the bridge without significant retrofit work. They noted that the additional design features could be reviewed at a later date once the public input had been developed. Concerning the bermed access area, they suggested integrating terraces which could be used by the public, and to ensure future development would not destabilize the integrity of the berm.

Board members suggested working with an artist on lighting that could tie both public access areas together in a memorable way that pays tribute to the historic bridge structure, and incorporating Bay Bridge steel in a large enough scale to be meaningful, beyond reuse as a guardrail.

IV. Environmental Review. Caltrans, the lead agency, determined that the proposed project is statutorily exempt from the need to prepare an environmental document under the California Environmental Quality Act (CEQA), under Street and Highways Section 182.2, which provides for CEQA exemption of toll bridge seismic retrofit and replacement projects. The San Francisco–Oakland Bay Bridge East Span Seismic Safety Project qualifies under this category.

Caltrans and the Federal Highway Administration, in cooperation with U.S. Coast Guard, completed a Final Environmental Impact Statement (FEIS) for the Bay Bridge project in May 2001, pursuant to the National Environmental Policy Act (NEPA). The FEIS has been revalidated several times since then for actions that included updating the project description and assessing potential impacts associated with controlled blasting of Pier E3 and then Piers E4 to E18. Most recently, in 2017, a revalidation of the FEIS was prepared to include removal of up to four marine foundations during the same blast event for Piers E7 to E18.

A re-evaluation of the FEIS is required for the proposed project to update the project description and assess potential adverse effects associated with the retention of Piers E2, E21, E22, and E23 and the construction and maintenance of new structures for public access. Caltrans is in the process of preparing the corresponding revalidation of the FEIS. This revalidation is dependent on the issuance of the Biological Opinion from NMFS. As the Biological Opinion is not yet available, the Commission staff has consulted with Caltrans staff. According to the applicant, based on the analysis and technical documentation prepared for the proposed project, Caltrans' preliminary finding is that the proposed changes to the Bay Bridge project will not result in any new significant impacts, and thus the existing FEIS would remain valid.

V. Relevant Portions of the McAteer-Petris Act

1. Section 66602
2. Section 66605
3. Section 66632

VI. Relevant Map and Policies of the San Francisco Bay Plan

1. *San Francisco Bay Plan* Maps Nos. 4 and 5
2. *San Francisco Bay Plan* Policies on Fish, Other Aquatic Organisms, and Wildlife
3. *San Francisco Bay Plan* Policies on Water Quality
4. *San Francisco Bay Plan* Policies on Water Surface Area and Volume
5. *San Francisco Bay Plan* Policies on Subtidal Areas
6. *San Francisco Bay Plan* Policies on Climate Change
7. *San Francisco Bay Plan* Policies on Safety of Fills
8. *San Francisco Bay Plan* Policies on Protection of the Shoreline
9. *San Francisco Bay Plan* Policies on Recreation
10. *San Francisco Bay Plan* Policies on Public Access
11. *San Francisco Bay Plan* Policies on Appearance, Design and Scenic Views
12. *San Francisco Bay Plan* Policies on Mitigation

Exhibits

- A. **Project Vicinity Map**
- B. **San Francisco–Oakland Bay Bridge Project Area**
- C. **Project Area (Yerba Buena Island)**
- D. **Existing Site Conditions and Scale Comparison (Yerba Buena Island)**
- E. **Bicycle Access (Yerba Buena Island)**
- F. **Proposed Public Access (Yerba Buena Island)**
- G. **Site 11 (Yerba Buena Island)**
- H. **Interim Parking and Access (Yerba Buena Island)**
- I. **Final Parking and Access (Yerba Buena Island)**
- J. **Proposed Observation Area (Yerba Buena Island)**
- K. **Views of Proposed Project (Yerba Buena Island) (1)**
- L. **Views of Proposed Project (Yerba Buena Island) (2)**
- M. **Views of Proposed Project (Yerba Buena Island) (3)**
- N. **Views of Proposed Project (Yerba Buena Island) (4)**

- O. Cross-Section of Public Observation Area with Sea Level Rise (Yerba Buena Island)**
- P. Proposed Observation Deck Cross-Section (Yerba Buena Island)**
- Q. Project Area (Oakland)**
- R. Existing Site Conditions and Photos (Oakland)**
- S. Proposed Public Access (Oakland)**
- T. Proposed Public Pier (Oakland) (1)**
- U. Proposed Public Pier (Oakland) (2)**
- V. Proposed Access to Bay Bridge Bicycle and Pedestrian Trail (Oakland)**
- W. Cross-Section of Public Pier with Sea Level Rise (Oakland)**
- X. Views of Proposed Project (Oakland) (1)**
- Y. Views of Proposed Project (Oakland) (2)**
- Z. Proposed Public Pier Cross-Section (Oakland)**